

WHAT IS CLAIMED IS:

1. A justification authenticating system comprising:

a database for storing an identifier of a personal certificate and digital watermark information related to said identifier;

5 a personal certificate containing said identifier;

said personal certificate also containing a readable authentic image in which a digital watermark relative to said identifier is embedded;

a read means for reading at least said authentic image from said personal certificate;

10 a watermark information inquiring means for extracting digital watermark information corresponding to said identifier from said authentic image; and

a watermark information comparing means for judging whether said digital watermark information extracted by said watermark information inquiring means from said personal certificate is identical to said watermark information stored in said database;

15 if said watermark inquiring means finds identical watermark information in said watermark information from said authentic image and said database, said watermark inquiring means justifies said personal certificate; and

20 if the watermark information from the two sources are not identical, then the watermark inquiring means fails to justify said personal certificate.

2. The justification authenticating system of claim 1, wherein said personal certificate includes:

an information carrier for storing said authentic image; and

25 said digital watermark is embedded in said authentic image stored in said information carrier.

3. The justification authenticating system of claim 2, wherein said information carrier is at least one of a semiconductor memory and a magnetic recording material.

5 4. The justification authenticating system of claim 2, wherein:
said information carrier includes said authentic image being a printed
authentic image affixed to said personal certificate; and
said read means reads said printed image.

10 5. The justification authenticating system of claim 1, wherein at least one
of said identifier and said digital watermark information includes an element that
is randomly generated.

15 6. The justification authenticating system of claims 1, further comprising:
means for updating said digital watermark information stored in said
database and said digital watermark information embedded in said authentic image
in said personal certificate each time said watermark information inquiring means
judges said digital watermark information to be justifiable.

7. The justification authenticating system of claim 1, further comprising:
a communication device for communicating said watermark information
between said watermark information inquiring means and said database.

20 8. A personal certificate issuing system comprising:
an identifier generating means for generating an identifier unique to a
personal certificate;

a watermark information generating means for generating digital watermark
information corresponding to said identifier;

25 a database for storing said identifier of said personal certificate and said
digital watermark information relative to said identifier in relation to each other;

a watermark information registering means for storing said identifier

generated by said identifier generating means and said digital watermark information generated by said watermark information generating means in said database;

an image input means for inputting a raw authentic image;

5 a watermark-embedded image forming means for forming a watermark-embedded authentic image in which said digital watermark is embedded on said authentic image input by said image input means; and

10 a personal certificate that readably carries said authentic image generated by said watermark-embedded image forming means and said identifier generated by said identifier generating means.

9. The personal certificate issuing system of claim 8, wherein:

said personal certificate includes an information carrier for storing said authentic image; and

15 said authentic image includes a digital watermark embedded in said authentic image stored in said information carrier.

10. The personal certificate issuing system of claim 9, wherein said information carrier is at least one of a semiconductor memory and a magnetic material.

11. The personal certificate issuing system of claim 9 wherein:

20 said information carrier includes said authentic image being a printed authentic image affixed to said personal certificate; and

said read means reads said printed authentic image.

25 12. The personal certificate issuing system of claim 8, wherein at least one of said identifier and said digital watermark information includes an element that is randomly generated.

13. The personal certificate issuing system of claim 8, wherein said digital

watermark information stored in said database and embedded in said authentic image of said personal certificate are updated at a predetermined time.

14. The personal certificate issuing system of claim 13, wherein said predetermined time includes each time said system correctly justifies an authentic image.

15. The personal certificate issuing system of claim 8, further comprising: a communication device for communicating said watermark information between said watermark information inquiring means and said database.

16. A personal certificate comprising:
a unique identifier;
an authentic image of an authorized user of said personal certificate;
said authentic image being viewable by eye;
said authentic image containing embedded therein digital watermark information corresponding to said identifier; and

means for permitting communication of said identifier and said digital watermark information to a database remote from said personal certificate.